DOCUMENT RESUME

ED 256 801 TM 850 291

AUTHOR Gross, Susan
TITLE Follow-up Evaluation of Mark Twain Students: Phase II.
INSTITUTION Montgomery County Public Schools, Rockville, Md. Dept. of Educational Accountability.
PUB DATE Jul 84
NOTE 31p.; For related document, see ED 236 158.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Achievement; Behavior Problems; *Emotional Disturbances; Followup Studies; Intermediate Grades; Learning Disabilities; Learning Problems; Secondary Education; Special Education; *Special Schools; *Student Characteristics; *Student Evaluation; Student Placement
IDENTIFIERS *Mark Twain School MD; Montgomery County Public Schools MD

ABSTRACT

The Mark Twain School in Rockville, Maryland serves emotionally disturbed students in Grades 5 through 12 whose severity of emotional problems seriously impairs their successful functioning in regular classes. The Department of Educational Accountability has conducted a study of characteristics of students served in the Mark Twain School and the degree of their academic success in regular schools after completing the Mark Twain program. This study was designed to describe the student population at Mark Twain in recent years; monitor the progress of former students who have been returned to regular schools; and determine which variables best predict the eventual success of these students. This report describes the current Mark Twain program, evaluation issues, and the sample and instrumentation used in the study. Detailed findings of this study are presented graphically. The predictor variables of success determined by the study were discussed. A five page executive summary is included. (DWH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED256801

MONTGOMERY COUNTY
PUBLIC SCHOOLS
ROCKVILLE, MARYLAND

Follow-up Evaluation of Mark Twain Students: Phase II

July 1984

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
D. Hymes
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Wilmer S. Cody
Superintendent of Schools

Prepared by the Department of Educational Accountability

TM 850 291

MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

FOLLOW-UP EVALUATION OF MARK TWAIN STUDENTS: PHASE II

by

Dr. Susan Gross

Steven M. Frankel, Director
Department of Educational
Accountability

Joy A. Frechtling, Director
Division of Instructional Evaluation
and Testing

EXECUTIVE SUMMARY

FOLLOW-UP EVALUATION OF MARK TWAIN STUDENTS: PHASE II

BACKGROUND

The Mark Twain school serves emotionally disturbed students in Grades 5 through 12 whose severity of emotional problems seriously impairs their successful functioning in regular MCPS classes. The primary mission of the Mark Twain school is to help these students develop academic skills and mature responsible behavior patterns so they can return to and be graduated from MCPS high schools or successfully enter the world of work. The Mark Twain program places emphasis on the student's acceptance of responsibility and natural consequences for his/her behavior.

The Department of Educational Accountability, at the request of the principal of the Mark Twain school and the director of the MCPS Department of Special Education and Related Services, has conducted a study of the characteristics of students served in the Mark Twain school and the degree of success they have had in regular MCPS schools after leaving Mark Twain.

THE CURRENT STUDY

The major goals of the current study are the following:

- To describe the population served at the Mark Twain school in recent years
- To monitor the progress of former Mark Twain students who have been returned to regular MCPS schools
- To determine which variables best predict the eventual success of thesestudents in the regular MCPS schools once they leave Mark Twain.

THE SAMPLE

Description of the population served at Mark Twain in recent years is based on record reviews of 333 students who were enrolled in the Mark Twain school in 1979-80 and/or 1980-81. The assessment of success of former Mark Twain students in regular MCPS schools is based on a follow-up of 61 students who left Mark Twain in either June 1980 or June 1981. The analysis of variables that are predictors of success in the regular MCPS program is based on both samples of students.

FINDINGS

DESCRIPTION OF THE STUDENT BODY ENROLLED IN THE MARK TWAIN SCHOOL

The typical Mark Twain student is a white male in Grades 7-11. He has been referred to Mark Twain because of behavior problems, usually acting out or being unable to adjust to normal classroom routines. He typically lacks certain academic skills necessary for him to perform at the level of his classmates. One out of three Mark Twain students has been diagnosed as

having learning disabilities.The educational pattern of these students is fragmented. The typical student has been in several educational placements before being referred to Mark Twain, and he has probably received some type of special education service in the past.

When data obtained from cohorts of students entering Mark Twain in 1978, 1979, and 1980 were compared, few differences were found in either their background histories or in their manifesting behavior. However, it was observed that significantly more girls were enrolled in Mark Twain in 1979 and 1980 than were enrolled earlier; and significantly more of the student population enrolled in 1979 and 1980 were diagnosed as having specific learning disabilities.[1] Additionally, Mark Twain program staff reported that significantly fewer of the parents of later student enrollees showed interest in school activities.

SUCCESS OF FORMER MARK TWAIN STUDENTS IN REGULAR MCPS SCHOOLS

The assessment of success of former Mark Twain students in the regular MCPS schools is based on a follow-up of 61 students who left Mark Twain in either June 1980 or June 1981. Of the 61 students returned to regular schools, 35 students were recommended for return to the regular schools by the Mark Twain staff (and are considered program completers); 26 students left the Mark Twain school prior to completing the program either because their parents removed them from the program or because they were administratively removed and placed in another school setting.

Overall, 25 percent of the 61 students returned to regular MCPS schools were doing quite well in their regular school program, and 30 percent were having serious problems. Additionally, the grades earned by students in their regular school placement after leaving Mark Twain were significantly higher than their grades for the year prior to their being sent to Mark Twain.[2] Moreover, 89 percent of these students returned to regular programs who were of graduation age and/or grade had been graduated from high school at the time of data collection.

In most areas of performance students who completed the Mark Twain program had significantly greater success than did those who did not complete the program. Areas in which significant differences were noted included the following: guidance counselors' reports of problems in school, teachers' reports of academic and social behavior, and school attendance. These results are corroborative of earlier studies.[3] Areas in which no

---

1. Part of this shift in population may be due to the opening of the Regional Institute for Children and Adolescents (RICA) in the 1980-81 school year. Students with serious emotional handicaps who would have been placed at Mark Twain in earlier years now may be served in the full day or residential program provided by RICA.

2. Grade point averages for both points in time were available for 41 of the 61 returnees. The pre-Mark Twain grade point average was 1.56, and the post-Mark Twain grade point average was 1.97.

3. See Follow-up Evaluation of Mark Twain Students, MCPS, Department of Educational Accountability, May 1982, S. Gross.

differences were found between completers and noncompleters included the types of educational programs into which they were placed after they left Mark Twain and their grades in the post-Mark Twain program.

The following are the key findings of the current study:

- According to guidance counselors, 24 percent of the students were experiencing many or continuing problems in the regular school setting and were not participating in classroom activities. However, 39 percent were doing quite well. Students who completed the program were judged by their counselors to have significantly fewer problems in the regular school setting than were those who did not complete the program.

- Teachers reported that the behavior of 24 percent of the students was very limiting or extremely limiting to effective classroom functioning. However, they rated the behavior of 21 percent of the students not at all limiting to effective classroom functioning. Areas of behavior considered most positive by the teachers included students' acceptance of authority, respect for others, and classroom conformity.[4] Areas considered least positive were students' problem-solving ability and their task orientation. Students who completed the program were judged by their teachers to have significantly better skills or behavior in task orientation, problem-solving ability, acceptance of authority, respect for others, and social skills than did those who did not complete the program.

- Average absenteeism for the students returned to regular schools was 15 percent, compared to MCPS' average absenteeism of about 5 percent. Additionally, 30 percent of the students were absent between 20 and 57 percent of the school year. Thus, attendance in the regular school program continues to be a problem for many of the former Mark Twain students. Attendance in the second year back in regular schools was considerably improved, however, with 32 percent of the students absent less than 5 percent of the school year. Students who completed the program had significantly better attendance in their regular school placement than did students who did not complete the program.

- One-third of the students needed a change in school placement due to problems encountered in the first year of return to the regular school placement. However, students who completed the program were significantly less likely to need a change in their educational placement once in the regular school than were students who did not complete the program.

- Two-thirds of the students returned to regular MCPS schools (41 students) were placed in educational settings in which they were completely mainstreamed in regular classes or received at most one hour a day of special education services. The remaining one-third

4. It is of interest to note that these are the areas that are stressed most heavily by Mark Twain as student goals.

were receiving at least three hours per day of special education services, primarily resource room services or services related to emotional handicaps. No differences were found in the types of educational programs in which students who completed or did not complete the program were placed. Sixty-nine percent of the students returned to the same level or a less restrictive placement in the regular MCPS schools after being in Mark Twain than the placement they were in prior to Mark Twain.

- Thirteen percent of the students had grade point averages of B or better at the end of the first year; however, 21 percent had averages below D. Eighteen percent of the students had grade point averages of B or better in their second year in regular school, but 14 percent had averages of D or lower. There was no significant difference in the grade point averages of students who completed or did not complete the program.

- Fifteen students (25 percent) were graduated at the end of the first year back in regular school, and another 9 students (14 percent) were graduated at the end of the second year back. These figures represent 89 percent of the students returned to regular schools who were eligible to be graduated by the time of data collection.

PREDICTORS OF SUCCESS IN THE REGULAR MCPS PROGRAM

Predictors of success in the regular MCPS program were analyzed by examining the characteristics of students who were returned to regular MCPS schools and by comparing the characteristics of students who successfully completed the Mark Twain program to those who had not.

Analyses of all family background and student characteristic variables were conducted for these students, and tests of significance were applied to these variables in an attempt to determine which ones, if any, linked to eventual success as measured by completion of the Mark Twain program and subsequent success in regular MCPS programs. Of all the variables considered, only three were found to discriminate statistically between successful and unsuccessful students. They were the following:

- Successful students had fewer problems with authority figures prior to and after their Mark Twain experience than did unsuccessful students.

- Prior to Mark Twain enrollment, successful students had more stable educational histories in that they had been in fewer educational placements than had unsuccessful students and they had been in fewer prior placements in special education programs.

- Successful students had parents who were more interested and involved in their educational program than did unsuccessful students.

Due to the retrospective nature of the data collection and analyses, it is difficult to determine the exact causal relationships between these variables and school success. For example, is a stable educational history

a predictor of school success, or is it the lack of success in the classroom that causes the student to be moved from program to program in the hope of finding the "best fit"? Or, do the data suggest that the less severe the student's problems at intake into Mark Twain, the greater the probability of achieving success with that student? Or, do the data suggest that the less severe the student's problems at intake to Mark Twain, the greater the probability of achieving success with that student?

What is of interest is that the factors that emerged were the only ones that appeared with consistency and that they were among only a few variables cited by the Mark Twain staff as variables that impact upon the success of their students. Therefore, it is suggested that further study of the relationship of these variables to student success might be in order.

TABLE OF CONTENTS

	Page
Acknowledgments	ii
Historical Perspective	1
The Current Program	2
The Regular Mark Twain Program	2
The Satellite Program	2
The School-Within-A-School Programs	2
The Mission of the Mark Twain Program	3
Description of the Current Study	3
Evaluation Issues	3
The Sample	3
Instrumentation	4
Detailed Findings	4
Description of the Student Body Enrolled in the Mark Twain School	4
Changes in the Mark Twain Student Population Over Time	6
Success of Former Mark Twain Students in Regular MCPS Schools	7
Predictors of Success in the Regular Program	19

ACKNOWLEDGMENTS

Survey Design: Dr. Pamela Barnhouse Walters

Data Collection: Patrick Byrne
Abby B. Shapiro
Susan Waxdahl

Special thanks to Susie Peangmeth and the teacher advisors at Mark Twain for their assistance in data collection.

FOLLOW-UP EVALUATION OF MARK TWAIN STUDENTS: PHASE II

HISTORICAL PERSPECTIVE

The Mark Twain school, originally designed as an experimental program for emotionally disturbed adolescents in Montgomery County Public Schools who had failed to learn in the normal public school environment, admitted its first group of students in February 1972 after 11 years of planning and program development. At the time of Mark Twain's inception, only 2 out of 132 programs in institutions of higher education were training potential teachers to teach emotionally disturbed adolescents. Moreover, the emphasis in these programs was on handling these students in a psychotherapeutic manner at the expense of the educational program.[1]

The Mark Twain program was innovative for its time. It was designed to be a temporary placement for the students, one in which they would receive the academic and interpersonal skills necessary for them to succeed in a normal school setting. MCPS Regulation 510-4: Referral and Selection of Pupils for Mark Twain School, issued August 30, 1971, stipulated five entry criteria for the potential Mark Twain student:

1. He [sic] demonstrates average or higher intellectual potential
2. He maintains sufficient self-control to meet the expectations of a day school, including behavior to and from school
3. It can be anticipated that he will make sufficient progress to be returned to a local school within a maximum of two years
4. He does not have a health problem or physical handicap that precludes his participation in the program or makes the program unsuitable
5. He can be expected to accept placement at Mark Twain

Additional criteria for admission stipulated the need for parent cooperation in and support of the program, and documentary evidence of prior unsuccessful efforts to meet the student's needs at the local school level. Early in the history of Mark Twain's operation it became apparent that most of the students referred to the school had multiple problems. Most had academic deficiencies and lacked motivation. All of them had behavioral problems. School records from these students' prior years in MCPS indicated that they were caught in a vicious cycle: due to poor behavior and lack of motivation they could not attend well in class and fell behind their classmates; and conversely, due to lack of academic skills, their behavior became more dysfunctional. The major goal of the staff at the Mark Twain school was to help the student effectively control his/her behavior so that the cyclical spiral could be halted and positive growth could take place.

---

1. Progress Report of the Mark Twain Planning Office, MCPS, October, 1970.

From the time the school opened its doors in 1972 until June 1980, there was a two-year maximum time limit for students to be enrolled in Mark Twain. At intake, those students who were deemed to have behavioral problems that were so severe that the two-year limitation was thought to be unreasonably short were denied admission to the school. Approximately 8 percent of the applicants were rejected from the program for this reason. However, even with the restrictions placed on admission into the program, the staff indicated that about 20 percent of the students were not as ready to leave the Mark Twain program at the end of two years as the staff and parents would have liked them to be; and they had considerable difficulties adjusting to the regular school environment when they returned to their home schools.

Additionally, with the adoption of PL 94-142 in 1975 (the Education of All Handicapped Act), many students who were formally enrolled in residential or private day schools were admitted into MCPS in order to provide them with a less restrictive educational program. These students had more severe behavioral problems than did those formerly admitted to Mark Twain; and as a result, program modifications were necessary to meet their educational needs.

THE CURRENT PROGRAM

THE REGULAR MARK TWAIN PROGRAM

The current Mark Twain regulations allow students to remain in the school for more than the original two-year limit. Several program offerings are available to the students. The "regular" program is provided in the Mark Twain building, with small classes that range from completely self-contained to a modified departmentalized structure. The placement of students in class type depends upon the severity of their behavior problems. Junior high and senior high school satellite programs have been established in several of the MCPS secondary schools, and two new school-within-a-school programs have been added to the offerings in the main Mark Twain building.

THE SATELLITE PROGRAM

The satellite program provides a mainstreamed environment for those students whose behavior can be controlled in the "regular" MCPS school setting. This environment typically provides a halfway setting for those students who will soon be returning to their home secondary schools. The satellite environment provides the regular secondary school structure with all its demands on the students, while still allowing the supportive assistance and encouragement provided by the trained Mark Twain staff. It is fairly common for students to spend up to two years in the regular Mark Twain program and a final transitional year in a satellite program before being returned to a regular MCPS program.

THE SCHOOL-WITHIN-A-SCHOOL PROGRAMS

The two schools-within-a-school are the Samuel Clemens Center, a program for emotionally handicapped students with learning disabilities and the Alternative Educational Program, a terminal high school program for students whose severity of emotional handicap is such that return to a regular MCPS

high school is considered unlikely. Students may remain in these two programs for an unspecified number of years.

THE MISSION OF THE MARK TWAIN PROGRAM

The present primary mission of the Mark Twain program is to help the seriously emotionally disturbed students who are placed at the school develop academic skills and mature responsible behavior patterns so they can return to and be graduated from MCPS high schools or successfully enter the world of work. The Mark Twain program places emphasis on the student's acceptance of responsibility and natural consequences for his/her behavior. The program is designed to provide increased privileges for students as they are able to display mature responsible behavior patterns. Enrollment in the various Mark Twain programs and satellites approximates 400 students in Grades 5-12.

DESCRIPTION OF THE CURRENT STUDY

EVALUATION ISSUES

The current evaluation study was initiated at the request of the Office of Special and Alternative Education and the principal of the Mark Twain school. In requesting this evaluation of Mark Twain students, specific interest was focused on the possibility of determining which factors, or sets of variables, might best be able to predict which types of students had the highest probability of successfully completing the Mark Twain program and successfully returning to a regular MCPS secondary school.

The three major purposes of this evaluation were the following:

- To describe the current student body that is enrolled in the Mark Twain school and to document changes in the composition of this group over time
- To assess the degree of success (or failure) the former Mark Twain students are having in the regular MCPS school setting
- To isolate which student characteristics are the most effective predictors of success in the Mark Twain program and subsequent success in the regular MCPS program

THE SAMPLE

The sample consists of two groups of students, one of which is a subset of the other. The major sample consists of 333 students who were enrolled in the Mark Twain school in 1979-80 and/or 1980-81. This group of students is examined in this report in order to provide a complete description of the types of students served by the Mark Twain program in recent years. They comprise all students enrolled in the Mark Twain school during part or all of the time from September 1979 through June 1981 with the exception of students enrolled in the Samuel Clemens Center or the Alternative Education Program. Since these two programs were new to Mark Twain during the year of data collection, no attempt was made to gather data concerning students

served by them.

The second group, a subsample of the 333 students in the major group, consists of 61 students who were released from or who left the Mark Twain school in either June, 1980 or June, 1981 and returned to regular MCPS schools. These students are the primary focus of this study, since they are the group for whom post-Mark Twain outcomes may be assessed.

INSTRUMENTATION

The information used in this evaluation report was collected by the Department of Educational Accountability in several stages. Reviews of the school records of the 333 students enrolled in Mark Twain during 1979-80 and/or 1980-81 were conducted during that school year. For students who left Mark Twain in 1980, follow-up data were collected at two points in time: spring semester of the 1980-81 school year and spring semester of the 1981-82 school year. For the students who left Mark Twain in 1981, follow-up data were collected in the spring of the 1981-82 school year.

Record review data included students' educational history prior to Mark Twain, performance at Mark Twain, and where available, background information concerning the family situation in which the student lived. For the 61 follow-up students, retrospective record reviews were conducted. In addition, post-Mark Twain educational history was collected, including number and types of special school placements since Mark Twain, attendance and grades, teacher assessments of student behavior in class, and parent assessment of the Mark Twain program and its impact on the student.

The following sections contain the findings of the study.

DETAILED FINDINGS

DESCRIPTION OF THE STUDENT BODY ENROLLED IN THE MARK TWAIN SCHOOL

Sex, Race, and Grade

Of the 333 students enrolled in Mark Twain for some time during September 1979 through June 1981, 85 percent (282 students) were male, and 15 percent (51 students) female. The majority of the Mark Twain students were white (77 percent) or black (20 percent). One percent (3 students) were Asian, and 2 percent (6 students) were Hispanic. The majority of the students (90 percent) were enrolled in Grades 7 through 11. Table 1 presents the percentage of students by grade level.

Behavior in School Prior to Mark Twain

The data indicate that the students enrolled in the Mark Twain school manifested the range of problems that would be expected of severely emotionally disturbed students. The most common behavior problems found in these students were the inability to adjust to changes in classroom routines and disruptive or acting out behavior. Most Mark Twain students had prior histories of poor peer relations and poor relationships with authority figures. Table 2 presents the types of behavior problems the students manifested in their school years prior to enrollment in Mark Twain.

TABLE 1

Number and Percentage of Mark Twain Student Sample by Grade Level

Grade Level	Number of Students	Percentage of Students
3	2	1
6	18	5
7	43	13
8	74	22
9	71	21
10	63	19
11	50	15
12	12	4
Total	333	100

TABLE 2

Presenting Behavior of Students Prior to Mark Twain Enrollment

Behavior	Number of Students	Percentage of Students
Inability to Adjust	304	91
Acting Out	268	81
Poor Relations with Authority Figures	263	80
Poor Relations with Peers	266	80
Truancy	145	44
Withdrawn Behavior	114	34
Alcohol/Drug Abuse	55	17
Suspended from School	83	25

Academic Performance in School Prior to Mark Twain

For the vast majority of students referred to Mark Twain, academic deficiencies were indicated as part of the behavioral problem. Moreover, evidence of long-term problems was found in a large number of records. For example, 30 percent of the students (99 students) had been retained in grade at least one time prior to their enrollment in Mark Twain. Thirty-six percent (119 students) had diagnosed learning disabilities, and another 4 percent (12 students) had speech/language problems.

Seventy percent (226 students) had received some sort of special education service in their last educational placement prior to Mark Twain. Of this 70 percent, three-fifths, or 41 percent of the total sample, had spent their last educational placement in an all-day special educational program, residential program, a hospital setting, or home instruction.[2] Only 30 percent of the students (68 students) had spent all of their prior school years in regular classes with no special education support. Sixteen percent (52 students) had never been in a purely regular classroom educational setting.

Thirty-seven percent (122 students) had been enrolled in 5 distinct educational programs or different schools before being enrolled in Mark Twain, another 21 percent (70 students) had been enrolled in 4 prior programs or schools, and 24 percent (79 students) had been in 3 prior programs or schools. This pattern of mobility between school programs appears to be a characteristic of this population. What is unclear is whether it is a causal or resultant variable for students with behavior problems.

CHANGES IN THE MARK TWAIN STUDENT POPULATION OVER TIME

The information obtained from the student records was analyzed to determine whether any changes in the student population could be observed to have occurred over time. For the majority of students included in our sample, time of entry into Mark Twain was 1978 at the earliest (309 out of 333 entered in 1978 or later). Thus, any dramatic change in student population that may have resulted from the implementation of PL 94-142 could not be documented by these data. However, the record review data for this group were analyzed for statistically significant differences that might exist between those students who entered Mark Twain in 1978 (89 students), 1979 (121 students), or 1980 (99 students).

When the student composition, behavior in school prior to Mark Twain, and performance in school prior to Mark Twain were compared for the three entry years, only the following few variables showed statistically significant differences:

---

2. Home instruction is routinely used as a temporary placement for a student who is waiting to be placed in a special program.

- There were significantly more girls enrolled in Mark Twain in 1979 and 1980 than in 1978 (see Table 3).

- There were significantly more students with secondary handicaps in addition to emotional impairment in 1979 and 1980 than in 1978.[3] The secondary handicapping condition that occurred most frequently was specific learning disabilities (see Table 4).

- According to the teacher advisors, parents of the 1979 and 1980 Mark Twain entrants were significantly less interested in their children's education than were parents of the 1978 entrants (see Table 5).

SUCCESS OF FORMER MARK TWAIN STUDENTS IN REGULAR MCPS SCHOOLS

Description of the Students Returned to Regular Schools

There were 61 students who exited from Mark Twain in June 1980 or June 1981, and who enrolled in regular MCPS schools. Table 6 displays these students by sex, race, grade level at the time of exit from Mark Twain, and their year of exit. The majority of these students were white (82 percent) and male (87 percent). Thirty-two students (53 percent) left Mark Twain in June 1980, and 29 students (48 percent) left in June 1981.

Thirty-five students were returned with the sanction of the Mark Twain staff since they had been judged by the staff to have learned the appropriate behaviors that would enable them to be able to function in the regular school setting. These students are considered "completers" of the Mark Twain program. Twenty-six students either were moved from the school against the recommendation of the Mark Twain staff by their parents/guardians or through some administrative decision involving placement. These students are considered "noncompleters." Students who completed the Mark Twain program fared considerably better in the regular school setting than did noncompleters. Where differences were found in the study between completers and noncompleters they are presented in this section.

Amount of Time Students Spent in Mark Twain

The range of time students spent in Mark Twain before returning to a regular MCPS school varied from as little as two months to as much as 3 1/2 years, with an average time of two years being spent in Mark Twain (see Table 7). Students who completed the program spent an average of 2.2 years in Mark Twain, compared to 1.9 years for those who did not complete the program. This difference is statistically significant.

---

3. This difference may be due to the opening of the Regional Institute for Children and Adolescents (RICA) in the 1980-81 school year. Students with serious emotional handicaps may now be served at RICA.

TABLE 3

Number and Percentage of Female Students by Entry Year

Entry Year	Number of Females	Percentage of Females
1978	7	8
1979	23	19
1980	20	20

TABLE 4

Secondary Handicaps of Mark Twain Students by Entry Year

	None		Specific Learning Disabilities		Speech, Auditory, Vision, Health	
Entry Year	N	%	N	%	N	%
1978	57	64	28	32	4	4
1979	72	60	43	36	6	5
1980	44	44	41	41	14	14

TABLE 5

Family Interest in School Activities by Entry Year

	Always Interested		Usually Interested		Never to Sometimes Interested	
Entry Year	N	%	N	%	N	%
1978	51	59	23	26	13	15
1979	59	49	32	27	29	24
1980	36	38	32	33	28	29

TABLE 6

Students who Returned to Regular MCPS Schools

	Year Returned to Regular School					
	1980		1981		Both Years	
	N	%	N	%	N	%
Sex						
Male	28	87	25	86	53	87
Female	4	13	4	14	8	11
Race						
White	25	78	25	86	50	82
Black	5	16	4	14	9	15
Hispanic	1	3	-	-	1	2
Asian	1	3	-	-	1	2
Grade						
7th	2	6	-	-	2	3
8th	8	25	2	7	10	16
9th	10	31	7	24	17	28
10th	5	16	5	17	10	16
11th	3	9	7	24	10	16
12th	4	13	8	28	12	20
Total	32		29		61	

TABLE 7

Amount of Time Students Spent in Mark Twain Before Returning to Regular MCPS Schools

Time Spent in Mark Twain	Number of Students	Percentage of Students
Less than 0.5 years	5	8
0.5 to 1 year	10	16
1.6 to 2 years	12	20
2.1 to 2.5 years	14	23
2.6 to 3 years	13	21
More than 3 years	7	11

Enrollment Status of the Students

Setting into Which Students Were Returned

Although all 61 students enrolled in regular MCPS schools upon leaving Mark Twain, only 30 students (49 percent) were served completely in regular MCPS classes. Eleven additional students (18 percent) were provided with up to 1 hour a day of special education services in the receiving program, and the remaining 20 students (33 percent) received 3 or more hours per day of special education services in regular MCPS schools or were enrolled in a full day special educational program such as a Learning Center or Alternative School program (see Table 8).

The areas in which special education services were provided to the students who were returned to regular schools primarily included resource room services for students with learning disabilities, mild learning handicaps, or achievement discrepancies and services related to the students' emotional handicaps (see Table 9). No meaningful differences were found for program completers vs. noncompleters regarding the programs into which they were returned.

When comparisons were made between the educational placement of the students after Mark Twain compared to their placement prior to Mark Twain, it was found that 18 of the students (30 percent) returned to the same level placement that they were in prior to Mark Twain, 24 (39 percent) were placed in a less restrictive placement after Mark Twain than they were in prior to Mark Twain, and 19 (31 percent) were placed in a more restrictive setting afterwards.

Educational Setting of the Students After First Year in Regular School

At the end of the first year out of Mark Twain, one-third of the students had experienced a change in school placement due to problems encountered in their initial regular school placement. Of the remaining students, 25 percent had been graduated from high school; and the rest were either still enrolled in their initial regular school placement or had moved on to the next level of school (e.g., from junior high to high school). Table 10 shows the educational changes that took place after the first year in regular school.

Fifty-six percent of the students experienced at least one change in educational level of service during their first year out of Mark Twain. The majority of these educational placement changes were changes in the types of services the student was receiving, not the level of service provided.

However, 38 percent of the changes resulted in movement to a more or less restrictive level of service (i.e., from less than 3 hours per day of service to 3 or more hours per day of service or vice versa). Table 11 shows the changes in services observed. Thirty percent of the students experienced at least one change in special education services in the first year out of Mark Twain, 13 percent experienced two changes, and 13 percent three to five changes.

TABLE 8

Educational Programs Receiving Former Mark Twain Students

Service Level	Number of Students	Percentage of Students
Regular MCPS program	30	49
Up to 1 hour per day of special education services	11	18
Up to 3 hours per day of special education services	8	13
Full day of special education services in regular school	5	8
Full day of special education	7	12

* Services provided in special school or special wing of regular school (i.e., learning center or alternative school program).

TABLE 9

Special Educational Services Provided to Students in the Regular Schools

Service Provided	Number of Students	Percentage of Students
Resource Room	20*	33
Learning disabilities	15	25
Mild learning handicap	4	6
Achievement discrepancy	1	2
Emotional Handicap Services	18*	30

* Note: Numbers add up to more than 31 students receiving special education services since some students received multiple services.

TABLE 10

School Placements of Students After One Year

Placement	Number of Students	Percentage of Students
Routine Changes Not Indicative of Problems	42	70
Graduated	15	25
Same school or next level school	26	43
Moved out of MCPS	1	2
Changes Indicative of Problems	19	30
School change due to parent request or administrative decision	12*	20
Withdrawn from school	3	5
Home instruction	3	5
Nonpublic placement	1	2

* Two of these students returned to Mark Twain.[4]

4. There were 12 students in the entire sample of 333 students (4 percent) who had been returned to Mark Twain for a second enrollment period because they had not been successful in the regular MCPS program after being enrolled in Mark Twain the first time. These 12 students are not included in this group of 61 follow-up students.

TABLE 11

Changes in Level of Service During the First Year After Mark Twain

Type of Change	Number of Changes	Percentage of Changes
Change in type of service, but not level of service	36	62*
Change from up to 3 hours per day of special education to full day of special education	14	24
Change from full day of special education to up to 3 hours per day of special education	8	14

* Note: Percentages relate to proportion of all changes made within the school year and may reflect more than one change per individual student.

Students who completed the Mark Twain program had significantly more stable educational histories after being placed in regular MCPS schools than did the noncompleters, despite the fact that the educational histories of both groups prior to Mark Twain were quite similar to each other. Eighty-eight percent of the completers were still receiving the same level of educational service after one year in the regular MCPS school setting, 6 percent had been moved to a less restrictive educational setting during the school year, and 6 percent had been moved to a more restrictive setting. Of the noncompleters, 69 percent were still receiving the same level of educational service after one year in the regular MCPS school setting; but 31 percent had been placed in a more restrictive educational setting during the school year.

Students' Success in the First Year in the Regular School

Perceptions of Guidance Counselors and Teachers

According to the guidance counselors in the regular schools, 39 percent of the students were performing satisfactorily or outstandingly well in their first year out of Mark Twain and were participating considerably or to a great extent in classroom activities; 37 percent were experiencing some problems and participated moderately or to a limited extent in classroom activities; and the remaining 24 percent had experienced many or continuing problems and participated little or not at all in classroom activities.

Students who completed the Mark Twain program were judged by their guidance counselors to be having significantly fewer problems in their regular school placements than were students who did not complete the program. Fifteen percent of those who completed the program were judged to be doing outstandingly well in the regular school program, compared to only 4 percent of those who did not complete the program; 41 percent of the completers were performing satisfactorily, compared to 12 percent of the noncompleters; and 44 percent of the completers were having some, many, or continuing problems, compared to 84 percent of the noncompleters.

Teachers' assessments of the students' classroom behavior show a similar pattern of success for the students. Teachers were asked to rate the students on various aspects of their classroom behavior, using the following scale: 1 = extremely limiting to effective functioning in school; 2 = very limiting to effective functioning, 3 = limiting; 4 = somewhat limiting, and 5 = not limiting at all. On the average, 24 percent of the students' classroom behavior was considered by their teachers to be extremely or very limiting to their classroom performance, 54 percent was considered limiting or somewhat limiting, and 21 percent was considered not at all limiting.

The areas in which students were rated most positively by their teachers were acceptance of authority (44 percent of the students judged to behave in nonlimiting ways); showing respect for others (36 percent judged behaving in a nonlimiting manner); and classroom conformity (24 percent of students' behavior nonlimiting). Areas in which the students were rated least positively included problem-solving ability (44 percent of the students' behavior rated extremely or very limiting) and task orientation (34 percent

of the behavior rated extremely or very limiting). (See Table 12.)

Teachers' assessments of students' behaviors significantly favored the students who completed the Mark Twain program also. Completers were rated significantly better than noncompleters in task orientation, problem-solving ability, acceptance of authority, respect for others, and social skills (see Table 13).

Grades and Attendance

The grade point average of the students in their first year out of Mark Twain was an average of 1.9 for all the students (C = 2.0 and D = 1.0), with the highest grade point average being 3.5 and the lowest 0.0. Table 14 shows the range in grade point averages for the 61 students. Grade point averages were available for the year prior to Mark Twain and the year following Mark Twain for 41 of the 61 students. Post-Mark Twain grade point averages were significantly higher than pre-Mark Twain averages (1.97 vs 1.56). There were no significant differences observed in the grades of students who completed or did not complete the Mark Twain program.

Average absenteeism for the students returned to regular schools was 15 percent, compared to MCPS' average absenteeism of about 5 percent. Additionally, 30 percent of the students were absent between 20 and 57 percent of the school year (see Table 15). Thus, attendance in the regular school program continues to be a problem for many of the former Mark Twain students.

Significant differences were found in the attendance of students who completed or did not complete the program, however, with those who completed the program having significantly lower absenteeism than those who did not complete it (see Table 16).

Success in the Second Year in the Regular School

Enrollment

Of the 32 students who left Mark Twain in June 1980, eight students (25 percent) had been graduated from high school after the first year out of Mark Twain, two students (6 percent) had once again entered Mark Twain, and the remaining 22 students (69 percent) were still enrolled in a regular MCPS school. Of these 22 students, nine students were graduated at the end of the second year in regular MCPS schools.[5]

Perceptions of Guidance Counselors

Of the 22 students remaining in the regular schools, six students (27 percent) were judged by their counselors to be performing satisfactorily or outstandingly well in school, nine students (41 percent) were experiencing

---

5. Total graduates over the two-year period numbered 25, which comprised 89 percent of those eligible for graduation.

TABLE 12

Teachers' Ratings of Students' Attributes of Personality/Behavior

Behavior/Attribute	Behavior Extremely Limiting or Very Limiting		Behavior Limiting or Somewhat Limiting		Behavior Not at all Limiting	
	N	%	N	%	N	%
Classroom Conformity	9	16	33	60	13	24
Task Orientation	19	34	28	51	8	15
Self-worth	6	10	40	73	9	16
Self-responsibility	15	27	34	62	6	11
Emotional Control	14	26	33	60	8	15
Problem-Solving Ability*	24	44	24	44	4	7
Acceptance of Authority	10	18	21	38	24	44
Respect for Others	9	15	25	46	20	36
Social Skills	15	27	30	55	10	18

* Attribute not observed by teachers of three students.

TABLE 13

Teachers' Ratings of Students Who Completed/Did Not Complete the Mark Twain Program

Behavior/Attribute	Behavior Judged Limiting, Very Limiting, or Extremely Limiting			
	Completers		Noncompleters	
	N	%	N	%
Task Orientation	12	38	18	78
Problem Solving	15	46	18	78
Acceptance of Authority	9	28	15	65
Respect for Others	10	31	9	39
Social Skills	13	41	15	65

TABLE 14

Grade Point Averages in the First Year Following Mark Twain

Grade Point Average	Number of Students	Percentage of Students
Less than 1.0*	13	21
1.0 - 1.9	15	25
2.0 - 2.9	25	41
3.0 - 3.5	8	13

* Note: A = 4.0, B = 3.0, C = 2.0, D = 1.0, E = 0.0.

TABLE 15

Average Absenteeism in the First Year Following Mark Twain

Percentage Absenteeism	Number of Students	Percentage of Students
0 Percent	1	2
1 - 4 Percent	12	20
5 - 9 Percent	11	18
10 - 20 Percent	18	30
21 - 30 Percent	12	20
31 - 57 Percent	6	10

TABLE 16

Percentage Absenteeism of Students Who Completed/Did Not Complete the Mark Twain Program

Percentage Absenteeism	Completers		Noncompleters	
	N	%	N	%
0 Percent	0	0	1	4
1 - 4 Percent	10	29	2	8
5 - 9 Percent	7	21	5	19
10 - 20 Percent	12	35	5	19
21 - 30 Percent	4	12	8	31
31 - 57 Percent	1	3	5	19

some problems, and seven students (32 percent) were experiencing many or continuing problems. Nine of the students (41 percent) were judged to be participating considerably or to a great extent in classroom activities, 10 students (45 percent) were participating moderately or to a limited extent, and three students (14 percent) were reported not to be participating at all.

Grades and Attendance

The 22 students enrolled for a second year in regular MCPS schools had a grade point average of 1.9, overall, with the highest being 3.4, and the lowest 0.06 (see Table 17). Average absenteeism for this group was 12 percent (a considerable improvement over the first year's absenteeism), with a low of 1 percent and a high of 67 percent (see Table 18).

PREDICTORS OF SUCCESS IN THE REGULAR PROGRAM

Predictors of success in the regular MCPS program were analyzed by examining the characteristics of three groups of students: 1)the characteristics of the 61 students returned to regular MCPS programs in comparison to the characteristics of the entire group of 333 students, 2) the characteristics of those students returned to regular MCPS programs with the recommendation of the Mark Twain staff as compared to the characteristics of those returned against the recommendation of the Mark Twain staff, and 3) the characteristics of 12 students out of the group of 333 who had been returned unsuccessfully to regular MCPS programs and were once again enrolled in the Mark Twain program at the time of data collection. (These 12 students were not included in the group of 61 students for whom follow-up activities were conducted in this study.)

Analyses of all family background and student characteristic variables were conducted for the three groups of students identified above. Tests of significance were applied to these variables in an attempt to determine which ones, if any, linked to eventual success as measured by completion of the Mark Twain program and subsequent success in regular MCPS programs. Of all the variables considered, only three were found to discriminate statistically between successful and unsuccessful students. The variables were as follows:

- Successful students had fewer problems with authority figures prior to and after their Mark Twain experience than did unsuccessful students.

- Prior to Mark Twain enrollment, successful students had more stable educational histories in that they had been in fewer educational placements than had unsuccessful students, and they had been in fewer prior placements in special education programs prior to Mark Twain.

- Successful students had parents who were more interested and involved in their educational program than did unsuccessful students.

Due to the retrospective nature of the data collection and analyses, it is difficult to determine the exact causal relationships between these

TABLE 17

Grade Point Averages in the Second Year Following Mark Twain

Grade Point Average	Number of Students	Percentage of Students
Less than 1.0*	3	14
1.0 - 1.9	9	41
2.0 - 2.9	6	27
3.0 - 3.4	4	18

* Note: A = 4.0, B = 3.0, C = 2.0, D = 1.0, E = 0.0

TABLE 18

Average Absenteeism in the Second Year Following Mark Twain

Percentage Absenteeism	Number of Students	Percentage of Students
0 Percent	1	5
1 - 4 Percent	6	27
5 - 9 Percent	8	36
10 - 20 Percent	4	18
21 - 30 Percent	1	5
31 - 67 Percent	2	9

variables and school success. For example, is a stable educational history a predictor of school success, or is it the lack of success in the classroom that causes the student to be moved from program to program in the hopes of finding the "best fit"? Or, do the data suggest that the less severe the student's problem at intake to Mark Twain, the greater the probability of achieving success with that student?

What is of interest is that the factors that emerged were the only ones that appeared with consistency and that they were among only a few variables cited by the Mark Twain staff as variables that impact upon the success of their students. Therefore, it is suggested that further study of the relationship between these variables and student success might be in order.